AFS
IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Donald L. Nisley et al.	§	Group Art Unit:	3683
Serial No.: 09/938,793	§	Examiner:	Torres, Melanie
Filed: August 24, 2001	§		
For: SEALING SYSTEM FOR BEARING ASSEMBLY	§	Atty. Docket:	DODG:0044/YOD/EUB 01RE025

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING
37 C.F.R. 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

March 20, 2006 Stephanie Shamgar
Date

APPEAL BRIEF PURSUANT TO 37 C.F.R. §§ 41.31 AND 41.37

This Appeal Brief is being filed in furtherance to the Notice of Appeal mailed on January 13, 2006, and received by the Patent Office on January 20, 2006.

The Commissioner is authorized to charge the requisite fee of $500.00 for this Appeal Brief, and any additional fees which may be necessary to advance prosecution of the present application, to Deposit Account No. 01-0857, Order No. 01RE025/YOD/EUB (DODG:0044). Further, in accordance with 37 C.F.R. § 1.136, Appellants hereby provide a general authorization to treat this and any future reply requiring an extension of time as incorporating a request therefor. Furthermore, Appellants authorize the Commissioner to charge the appropriate fee for any extension of time to Deposit Account No. 01-0857, Order No. 01RE025/YOD/EUB (DODG:0044).

03/24/2006 DEMMANU1 00000027 010857 09938793
01 FC:1402 500.00 DA

1. **REAL PARTY IN INTEREST**

The real party in interest is Reliance Electric Technologies, LLC, the Assignee of the above-referenced application by virtue of the Assignment recorded at reel 012122, frame 0253, and recorded on August 24, 2001. Reliance Electric Technologies, LLC, the Assignee of the above-referenced application as evidenced by the documents mentioned above, will be directly affected by the Board's decision in the pending appeal.

2. **RELATED APPEALS AND INTERFERENCES**

Appellants are unaware of any other appeals or interferences related to this appeal. The undersigned is Appellants' legal representative in this appeal.

3. **STATUS OF CLAIMS**

Claims 1-10 and 12-21 are currently pending, are currently under final rejection, and, thus, are the subject of this appeal. Claims 22-26 have been allowed and claim 11 was previously cancelled; as such, these claims are not subject to this appeal.

4. **STATUS OF AMENDMENTS**

Appellants submitted an amendment to the specification subsequent to the Final Office Action mailed October 13, 2005, to obviate an objection to the specification made by the Examiner. This amendment merely incorporated an explicit description of features illustrated in the original figures provided by Appellants at the time of the filing of the present application. *See* Response to Final Office Action filed December 13, 2005, page 2; FIGS. 3 and 5. However, in the Advisory Action mailed January 5, 2006, the Examiner refused to enter this amendment.

Appellants respectfully submit that, because one of ordinary skill in the art upon viewing the figures of the present application would immediately appreciate that the seal formed by the cover 24 and the flinger 26 is a single-stage rotating seal, the refusal to enter this amendment appears to be the result of a misunderstanding by the Examiner of either the relevant law or the technology itself. *See* Pre-Appeal Brief Request for Review

filed January 13, 2006, pages 1-2. As the Board will appreciate, it is well-settled law that the figures of an application are part of the written description and are fully capable of providing the requisite support for an amendment to the specification. Further, as the figures of the present application fully support the amendment to the specification submitted subsequent to the Final Office Action, Appellants submit that the refusal to enter this amendment was improper. Although Appellants would appreciate guidance from the Board to the Examiner on this issue, Appellants do not believe that the refusal to enter this amendment to the specification has any impact on the issues discussed below with respect to the improper rejections of claims 1-10 and 12-21.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates generally to the field of antifriction bearings and bearing housings. *See* Application, page 1, lines 7-8. More specifically, the present invention relates to a novel sealing assembly for a bearing assembly. *Id.* at page 1, lines 8-10. The present application contains three independent claims, of which two independent claims, namely claims 1 and 13, have been improperly rejected. The subject matter of these two independent claims is summarized below.

With regard to the aspect of the invention set forth in independent claim 1, discussions of the recited features of claim 1 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a bearing assembly (e.g., 10) including a bearing insert (e.g., 64) and a bearing housing (e.g., 14) adapted to house the bearing insert. *See, e.g., id.* at page 4, line 27 – page 5, line 15; page 8, lines 6-8. The bearing assembly also includes a cover (e.g., 24) that is removably securable to, and that extends outwardly beyond the outermost edge of, the bearing housing. *See, e.g., id.* at page 5, lines 22-23; FIG. 3. Further, the bearing assembly has a rotatable flinger (e.g., 26) secured to the cover outwardly beyond the outermost edge of the bearing housing and is configured to form a single-stage rotating seal. *See id.* at page 5, lines 22-27; FIG. 3; *see also* page 7, lines 3-9 (noting the seal formed by sealing portion 38 of the rotatable flinger). The

rotatable flinger includes a first opening (e.g., 28) adapted to receive a rotatable shaft (e.g., 12) and to enable the rotatable flinger to form a compression seal against the rotatable shaft. *See, e.g., id.* at page 4, line 29 – page 5, line 1; page 5, lines 23-25; page 6, lines 4-11; FIG. 3. The rotatable flinger also includes an outer flange (e.g., 36) disposed external to the cover to fling material that comes into contact with the outer flange away from the bearing assembly. *See ,e.g., id.* at page 6, lines 13-22; FIG. 3.

With respect to the aspect of the invention set forth in independent claim 13, discussions of the recited features of claim 13 can be found at least in the below cited locations of the specification and drawings. By way of example, an embodiment in accordance with the present invention relates to a sealing assembly (e.g., 20) for forming a seal between a bearing assembly (e.g., 10) and a rotatable shaft (e.g., 12). *See, e.g., id.* at page 4, line 27 – page 5, line 1; page 5, lines 19-23. The sealing assembly includes a cover (e.g., 24) that is removably securable to a bearing housing (e.g., 14) and is configured to be disposed on the exterior of, and to extend outwardly beyond an outermost edge of, the bearing housing. *See, e.g., id.* at page 5, lines 1-23; FIG. 3. The sealing assembly also includes a rotatable member (e.g., 26) securable to the cover outwardly beyond the outermost edge of the bearing housing. *See, e.g., id.* at page 5, lines 22-27; FIG. 3. The rotatable member is adapted to receive the rotatable shaft therethrough, is configured to form a single-stage rotating seal (e.g, 38), and is configured to form a seal against the rotatable shaft and to rotate therewith to fling liquids or solids that come into contact with the rotatable member away from the cover. *See id.* at page 6, lines 4-25; page 7, lines 6-9; FIG. 3.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

First Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's first ground of rejection in which the Examiner rejected claims 1-4, 7, 12-17, and 21 under 35

U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,895,460 to Grzina ("the Grzina reference").

Second Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's second ground of rejection in which the Examiner rejected claims 1-4, 7, 12-17, and 21 under 35 U.S.C. § 103(a) as unpatentable over the Grzina reference in view of U.S. Patent No. 4,943,068 to Hatch et al. ("the Hatch et al. reference").

Third Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's third ground of rejection in which the Examiner rejected claim 6 under 35 U.S.C. § 103(a) as unpatentable over the Grzina reference in view of U.S. Patent No. 6,149,158 to Tripathy ("the Tripathy reference").

Fourth Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's fourth ground of rejection in which the Examiner rejected claims 8 and 19-21 under 35 U.S.C. § 103(a) as unpatentable over the Grzina reference in view of U.S. Patent No. 4,368,933 to Motsch ("the Motsch reference").

Fifth Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's fifth ground of rejection in which the Examiner rejected claims 9 and 10 under 35 U.S.C. § 103(a) as unpatentable over the Grzina reference in view of U.S. Patent No. 4,348,067 to Tooley ("the Tooley reference").

Sixth Ground of Rejection for Review on Appeal:

Appellants respectfully urge the Board to review and reverse the Examiner's sixth ground of rejection in which the Examiner rejected claims 5 and 18 under 35 U.S.C. §

103(a) as unpatentable over the Grzina reference and in view of U.S. Patent No. 4,781,476 to Uhen ("the Uhen reference").

7. ARGUMENT

As discussed in detail below, the Examiner has improperly rejected the pending claims. Further, the Examiner has misapplied long-standing and binding legal precedents and principles in rejecting the claims under §§ 102 and 103. Accordingly, Appellants respectfully request full and favorable consideration by the Board, as Appellants strongly believe that claims 1-10 and 12-21 are currently in condition for allowance.

A. Ground of Rejection No. 1:

The Examiner improperly rejected claims 1-4, 7, 12-17, and 21 under 35 U.S.C. § 102(b) as anticipated by the Grzina reference. Appellants respectfully traverse this rejection.

Legal Precedent

Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Moreover, the prior art reference also must show the *identical* invention "*in as complete detail as contained in the ... claim*" to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Accordingly, Appellants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter.

Deficiencies of the Rejection

Turning now to the present claims, the Grzina reference fails to disclose each element of claims 1-4, 7, 12-17, and 21. For instance, independent claim 1 recites "a

rotatable flinger secured to the cover ... and configured to form a *single-stage rotating seal*" (emphasis added). Similarly, independent claim 13 recites "a rotatable member securable to the cover ... [and] configured to form a *single-stage rotating seal*" (emphasis added). The other claims of this group, namely claims 2-4, 7, 12, 14-17, and 21, depend from one of independent claims 1 and 13 and incorporate the same elements as provided in their respective independent claims. Because the Grzina reference fails to disclose such elements, the cited reference fails to anticipate any of claims 1-4, 7, 12-17, and 21.

The Grzina reference is directed to an improved seal for bearing assemblies. *See* Grzina, col. 1, lines 4-5. The Grzina apparatus includes an end cover 6 secured to a bearing housing 9. *Id.* at col. 1, lines 43-55. The bearing housing 9 is configured to receive a shaft 7 and bearings 8. *Id.* Further, a shaft collar (not numbered) is attached to shaft 7 and cooperates with seal rings 1A and 1B to form two inner seal stages, while further cooperating with the cover 6 to form a third, outer seal stage that is denoted labyrinth seal 3. *Id.* at col. 2, lines 16-20. These seal stages control the egress of grease, inserted via passageway 10, from the Grzina apparatus. *Id.* at col. 2, lines 26-38; *see id.*, FIG. 2. It is important to note that the shaft collar of the cited reference forms both inner *and* outer seal stages. In particular, one of ordinary skill in the art will recognize that the Grzina shaft collar is configured to form a *three-stage* seal assembly.

In the Office Action, the Examiner equates labyrinth passage 3, formed between the shaft collar (not numbered) and the cover 6, to the rotating flinger or member of the present claims. Appellants respectfully note that a labyrinth cannot be reasonably compared to a rotating member or flinger. Indeed, the reference makes clear that labyrinth 3 is one stage of the multi-stage seal assembly comprising the shaft collar, the cover 6, and seal rings 1. *Id.* at col. 2, lines 16-25. Appellants previously invited the Examiner to clarify the present rejection, but the Examiner to this date has not provided any such clarification. *See* Response to Final Office Action filed December 11, 2005, page 10, lines 4-14. Because a passage cannot be reasonably equated with a rotatable structural member, and in the interest of advancing prosecution of this case, Appellants

continue to assume that the Examiner intended to equate the shaft collar of the Grzina reference, instead of the labyrinth passage, to the rotating flinger or member of the present claims.

As discussed both in the Grzina reference and the above summary, Grzina teaches that the shaft collar and cover 6 are configured to form a *multi-stage* seal assembly. Particularly, the cited reference teaches two inner stages defined by seal rings 1A and 1B, and one outer stage corresponding to labyrinth 3. However, unlike the shaft collar of Grzina, independent claims 1 and 13 clearly recite that the rotatable flinger or member is configured to form a *single-stage* rotating seal. *See* Application, FIG. 3. As the shaft collar taught by Grzina is clearly configured to form a *three-stage* seal, Appellants respectfully submit that this shaft collar cannot be reasonably considered to be a rotatable flinger "configured to form a single-stage rotating seal," as recited by the instant claims. Further, the Grzina reference does not contain any other structure that can be reasonably equated with this recited element. Consequently, Appellants respectfully submit that the Grzina reference cannot anticipate the present independent claims or their respective dependent claims.

In the Advisory Action, the Examiner pointed to the use of the word "comprising" in the preambles of claims 1 and 13 in support of the erroneous assertion that the Grzina shaft collar can be interpreted as a "single-stage rotating seal" because it includes at least one stage. *See* Advisory Action, page 2, lines 3-6. The Examiner's reliance on this transition word is grossly misplaced, and ignores the term "single-stage" clearly recited in the present claims. For illustrative purposes only, Appellants respectfully request the Board to consider the difference between a bicycle and a unicycle. Obviously, a bicycle has two wheels, whereas a unicycle has only one. It is true, of course, that each of these vehicles could be aptly described as a vehicle having a wheel, or at least one wheel. However, no reasonable person would attempt to suggest that a bicycle is a unicycle, or "a single-wheeled vehicle," simply because a bicycle includes a wheel or at least one wheel. Likewise, a tricycle is not a "single-wheeled vehicle." From this rudimentary

example, it is evident that a recitation of "a vehicle having a wheel" is qualitatively different than "a single-wheeled vehicle."

Turning back to the issue at hand, claims 1 and 13 clearly recite "a single-stage rotating seal." Importantly, these claims *do not* recite "a rotating seal having at least one stage," which is, unfortunately, the improper claim construction the Examiner relied upon in the present rejection. While the shaft collar of the Grzina reference is clearly configured to provide *three* sealing stages, and could be accurately described as a collar configured to provide at least one sealing stage, it is equally clear that the Grzina shaft collar is not configured to form a *single*-stage seal, as recited in the present claims. For at least these reasons, Appellants respectfully submit that the Grzina reference fails to disclose each and every element of the present claims.

In light of the foregoing remarks, Appellants respectfully request that the Board withdraw the improper anticipation rejection of claims 1-4, 7, 12-17, and 21. Additionally, Appellants respectfully request that the Board direct the Examiner to allow the instant claims.

B. **Ground of Rejection No. 2:**

The Examiner improperly rejected claims 1-4, 7, 12-17, and 21 under 35 U.S.C. § 103(a) as anticipated by the Grzina reference in view of the Hatch et al. reference. Appellants respectfully traverse this rejection.

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner

must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

Deficiencies of the Rejection

Appellants respectfully submit that the Grzina and Hatch et al. references collectively fail to disclose each element of claims 1-4, 7, 12-17, and 21. Particularly, as noted above, the Grzina reference teaches a *multi*-stage seal assembly and fails to teach a rotatable flinger or member configured to form a *single*-stage rotating seal, as generally recited in representative independent claims 1 and 13. However, as discussed below, the Hatch et al. reference also teaches a multi-stage seal and does not obviate the clear deficiencies of the Grzina reference. Because the Hatch et al. and Grzina references, even considered in hypothetical combination, fail to disclose each and every element of the present claims, the cited references cannot support a *prima facie* case of obviousness with respect to claims 1-4, 7, 12-17, and 21.

Appellants note that this rejection is a variation on the first ground of rejection set forth and discussed above with respect to the Grzina reference. In setting forth the present rejection, however, the Examiner acknowledged that the Grzina reference *fails to teach a flinger configured to from a single-stage rotating seal. See* Final Office Action mailed October 13, 2005, page 6. Of course, this admission is diametrically opposed to the Examiner's prior assertion that the Grzina reference does, in fact, disclose a single-stage rotating seal. While Appellants recognize the Examiner's right to provide alternative arguments, the provision of two fundamentally opposed alternatives with

respect to the teachings of the Grzina reference, in which the Examiner *directly* contradicts herself, at least suggests confusion as to the actual teachings of the Grzina reference. To overcome this newly acknowledged deficiency, the Examiner relied upon the Hatch et al. reference, stating only that: "Hatch et al. teach wherein a rotating seal is a single stage. (Figures 2-7)." *Id.* This assertion is erroneous.

The Hatch et al. reference teaches a seal and filter arrangement for a rotating shaft. *See* Hatch et al., col. 1, lines 9-14. Notably, the reference discloses a seal 9 mounted over a shaft 7. *Id.* at col. 4, lines 7-10. The seal 9 includes an annular case member 13, which has a radial flange 19, and an annular shaft engaging member 15. *Id.* at col. 4, lines 10-32; *see id.*, FIG. 2. The shaft engaging member 15 includes a channel 17 and a radially projecting lip element 25 having an end portion 27 and tip 29. *Id.* at col. 4, lines 26-66; *see id.*, FIG. 3. Importantly, the end of flange 19 cooperates with the channel 17 of shaft engaging member 15 to form a first seal stage, while end portion 27 of the member 15 cooperates with a contact surface of flange 19 to form a second seal stage. *See id.*, FIGS. 2-7. In other words, the shaft engaging member 15 and flange 19 form a *two*-stage seal. In fact, the Hatch et al. reference *explicitly states* that the seal disclosed in the reference is a "*two*-stage seal." *Id.* at col. 6, lines 60-62 (emphasis added).

Each of FIGS. 2-7 includes this two-stage seal, while various other cooperating elements are interspersed throughout these figures. With particular regard to FIG. 7, this figure illustrates a filter element 45 and the two-stage seal formed by the shaft engaging member 15 and the flange 19. *See id.*, FIG. 7. Appellants again respectfully note that the text of the cited reference associated with FIG. 7 *explicitly* refers to this seal as a "two-stage seal," and that this two-stage seal may be used with or without filter 45 or an additional seal 35. *Id.* at col. 6, lines 60-62. Because one skilled in the art would recognize the seal formed between member 15 and flange 19 to be a multi-stage seal, and because the cited reference explicitly refers to this seal as a "two-stage seal," this seal cannot be logically equated with the "single-stage rotating seal" recited by independent

claims 1 and 13. Thus, keeping in mind the previous deficiencies of the Grzina reference discussed above with respect to the first ground of rejection, it is apparent that the Grzina and Hatch et al. references fail to teach or suggest every element of the present claims. Consequently, these references cannot support a *prima facie* case of obviousness with respect to claims 1-4, 7, 12-17, and 21.

In light of the foregoing remarks, Appellants respectfully request that the Board withdraw the obviousness rejection of claims 1-4, 7, 12-17, and 21. Additionally, Appellants respectfully request that the Board direct the Examiner to allow claims 1-4, 7, 12-17, and 21.

C. **Ground of Rejection No. 3:**

The Examiner rejected claim 6 under 35 U.S.C. § 103(a) as unpatentable over the Grzina reference in view of the Tripathy reference. Appellants respectfully traverse this rejection.

Deficiencies of the Rejection

Appellants note that claim 6 depends from independent claim 1. As discussed above, the Grzina reference fails to disclose each element of independent claim 1. Further, Appellants respectfully submit that the Tripathy reference does not obviate the deficiencies of the Grzina reference discussed above with respect to independent claim 1. As a result, Appellants respectfully assert that dependent claim 6 is allowable on the basis of its dependency from a respective allowable independent claim, as well as for the subject matter separately recited in this dependent claim.

In light of the foregoing remarks, Appellants respectfully request that the Board withdraw the obviousness rejection of claim 6. Additionally, Appellants respectfully request that the Board direct the Examiner to allow dependent claim 6.

D. **Ground of Rejection No. 4:**

The Examiner rejected claims 8 and 19-21 under 35 U.S.C. § 103(a) as unpatentable over the Grzina reference in view of the Motsch reference. Appellants respectfully traverse this rejection.

Deficiencies of the Rejection

Appellants note that each of claims 8 and 19-21 depends from one of independent claims 1 and 13. As discussed above, the Grzina reference fails to disclose each element of independents claims 1 and 13. Further, Appellants respectfully submit that the Motsch reference does not obviate the deficiencies of the Grzina reference discussed above with respect to these independent claims. As a result, Appellants respectfully assert that dependent claims 8 and 19-21 are allowable on the basis of their dependency from a respective allowable independent claim, as well as for the subject matter separately recited in these dependent claims.

In light of the foregoing remarks, Appellants respectfully request that the Board withdraw the obviousness rejection of claims 8 and 19-21. Additionally, Appellants respectfully request that the Board direct the Examiner to allow dependent claims 8 and 19-21.

E. **Ground of Rejection No. 5:**

The Examiner rejected claims 9 and 10 under 35 U.S.C. § 103(a) as unpatentable over the Grzina reference in view of the Tooley reference. Appellants respectfully traverse this rejection.

Deficiencies of the Rejection

Appellants note that claims 9 and 10 depend from independent claim 1. As discussed above, the Grzina reference fails to disclose each element of independent claim 1. Further, Appellants respectfully submit that the Tooley reference does not obviate the deficiencies of the Grzina reference discussed above with respect to claim 1. As a result,

Appellants respectfully assert that dependent claims 9 and 10 are allowable on the basis of their dependency from a respective allowable independent claim, as well as for the subject matter separately recited in these dependent claims.

In light of the foregoing remarks, Appellants respectfully request that the Board withdraw the obviousness rejection of claims 9 and 10. Additionally, Appellants respectfully request that the Board direct the Examiner to allow dependent claims 9 and 10.

C. **Ground of Rejection No. 6:**

The Examiner rejected claims 5 and 18 under 35 U.S.C. § 103(a) as unpatentable over the Grzina reference in view of the Uhen reference. Appellants respectfully traverse this rejection.

Deficiencies of the Rejection

Appellants note that claims 5 and 18 depend from independent claims 1 and 13, respectively. As discussed above, the Grzina reference fails to disclose each element of independents claims 1 and 13. Further, Appellants respectfully submit that the Uhen reference does not obviate the deficiencies of the Grzina reference discussed above with respect to these independent claims. As a result, Appellants respectfully assert that dependent claims 5 and 18 are allowable on the basis of their dependency from a respective allowable independent claim, as well as for the subject matter separately recited in these dependent claims.

In light of the foregoing remarks, Appellants respectfully request that the Board withdraw the obviousness rejection of claims 5 and 18. Additionally, Appellants respectfully request that the Board direct the Examiner to allow the instant claims.

Conclusion

In view of the above remarks, Appellants respectfully submit that the Examiner has provided no supportable position or evidence establishing the anticipation of claims 1-4, 7, 12-17, and 21, or establishing a *prima facie* case of obviousness with respect to claims 1-10 and 12-21. Consequently, Appellants respectfully submit that all pending claims are in condition for allowance. However, if the Examiner or Board wishes to resolve any other issues by way of a telephone conference, the Examiner or Board is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: March 20, 2006

Patrick S. Yoder
Reg. No. 37,479
FLETCHER YODER
P.O. Box 692289
Houston, TX 77269-2289
(281) 970-4545

8. APPENDIX OF CLAIMS ON APPEAL

Listing of Claims:

1. A bearing assembly, comprising:

a bearing insert;

a bearing housing adapted to house the bearing insert;

a cover removably securable to the bearing housing, wherein the cover extends outwardly beyond an outermost edge of the bearing housing; and

a rotatable flinger secured to the cover outwardly beyond the outermost edge of the bearing housing and configured to form a single-stage rotating seal, the rotatable flinger comprising:

a first opening therethrough, the first opening being adapted to receive a rotatable shaft and to enable the rotatable flinger to form a compression seal against the rotatable shaft; and

an outer flange disposed external to the cover to fling material that comes into contact with the outer flange away from the bearing assembly.

2. The bearing assembly as recited in claim 1, wherein the rotatable flinger has an inner flange, the inner and outer flanges having a greater diameter than a second opening through the cover, the inner and outer flanges cooperating with a portion of the cover surrounding the second opening to secure the rotatable flinger to the cover.

3. The bearing assembly as recited in claim 2, wherein the inner flange is smaller in diameter than the outer flange.

4. The bearing assembly as recited in claim 2, further comprising a grease relief to enable grease within the bearing assembly to pass to a location exterior of the bearing assembly.

5. The bearing assembly as recited in claim 4, wherein the grease relief comprises a notch in the inner flange.

6. The bearing assembly as recited in claim 1, wherein the bearing insert comprises a plurality of ball bearings.

7. The bearing assembly as recited in claim 1, wherein the bearing insert comprises a plurality of roller bearings.

8. The bearing assembly as recited in claim 1, wherein the cover comprises a peripheral flange and the bearing housing comprises an annular groove, wherein the cover is secured to the bearing housing by elastically deforming the cover to position the peripheral flange within the annular groove.

9. The bearing assembly as recited in claim 8, further comprising an external sealing member positionable adjacent the bearing housing and the cover to form a seal between the bearing housing and the cover.

10. The bearing assembly as recited in claim 1, wherein the shaft extends through the bearing assembly, the bearing assembly further comprising a second cover and a second rotatable flinger secured to the second cover to form a seal between the bearing

assembly and the shaft, the second cover and second rotatable flinger being disposed opposite the first cover and the first rotatable flinger on the bearing housing.

12. The bearing assembly as recited in claim 1, wherein the cover is adapted to form an interior volume when secured to the bearing housing.

13. A sealing assembly for forming a seal between a bearing assembly and a rotatable shaft, comprising:

a cover removably securable to a bearing housing, wherein the cover is configured to be disposed on the exterior of the bearing housing and to extend outwardly beyond an outermost edge of the bearing housing; and

a rotatable member securable to the cover outwardly beyond the outermost edge of the bearing housing and adapted to receive the rotatable shaft therethrough, the rotatable member being configured to form a single-stage rotating seal and to form a seal against the rotatable shaft and to rotate therewith to fling liquids or solids that come into contact with the rotatable member away from the cover.

14. The sealing assembly as recited in claim 13, wherein the sealing assembly is adapted to form the single-stage rotating seal between the rotatable member and the cover.

15. The sealing assembly as recited in claim 14, wherein the rotatable member comprises an inner flange and an outer flange, the inner and outer flanges being disposed on opposite sides of the cover to secure the rotatable member to the cover.

16. The sealing assembly as recited in claim 15, wherein the inner and outer flanges are circular, the outer flange being larger in diameter than the inner flange.

17. The sealing assembly as recited in claim 15, further comprising grease, wherein the grease forms a seal between the rotatable member and the cover.

18. The sealing assembly as recited in claim 17, further comprising a grease relief in the inner flange.

19. The sealing assembly as recited in claim 13, wherein the cover comprises a peripheral flange configured for insertion within an annular groove of a bearing housing to secure the cover to the bearing housing.

20. The sealing assembly as recited in claim 19, wherein the cover comprises an elastically deformable material.

21. The sealing assembly as recited in claim 13, wherein the cover comprises a rigid plate.

9. **APPENDIX OF EVIDENCE**

N/A

10. **APPENDIX OF RELATED PROCEEDINGS**

N/A